UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

ASTORIA QUADRANGLE
OREGON – WASHINGTON
7.5 MINUTE SERIES (TOPOGRAPHIC – BATHYMETRIC)

Mapped by the Defense Mapping Agency and the National Ocean Service

Published for civil use by the Geological Survey

Control by NOS/NOAA, USCE, Oregon State Highway Department and Pacific Power and Light Company

Topography from aerial photographs by multiplex methods

Aerial photographs taken 1943. Field checked 1949

Bathymetry compiled by the National Ocean Service from tide-coordinated hydrographic surveys. This information is not intended for navigational purposes

Mean low water (dotted) line and mean high water (heavy solid) line compiled by NOS from tide-coordinated aerial photography. Apparent shoreline (outer edge of vegetation) shown by light solid line

Polyconic projection. 1927 North American Datum

10,000-foot grid based on Oregon coordinate system, north zone and Washington coordinate system, south zone

1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

To place on the predicted North American Datum 1983, move the projection lines 24 meters north and 97 meters east as shown by dashed corner ticks

There may be private inholdings within the boundaries of the National or State reservations shown on this map

Red tint indicates areas in which only landmark buildings are shown

Revisions shown in purple compiled by the Geological Survey from aerial photographs taken 1981 and other sources

This information not field checked. Map edited 1984

NATIONAL OCEAN SERVICE HYDROGRAPHIC SURVEY INDEX

HYDROGRAPHIC SURVEY INFORMATION

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)
H-5976	1935	1:10,000	01–05
H-7940	1951	1:10,000	01–05
H-8418	1956	1:10,000	02–10
H-8436	1958	1:5,000	01–05
H-8420	1958	1:10,000	01–10
H-8422	1958	1:10,000	01–17
NOS CHART 18521	MARCH 27, 1982	1:40,000	

SCALE 1:24000

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 MILE

1 5 0 1 KILOMETER

CONTOUR INTERVAL 50 FEET
DASHED LINES REPRESENT 25 FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
BATHYMETRIC CONTOUR INTERVAL 2 METERS WITH SUPPLEMENTARY 1 METER CONTOURS – DATUM IS MEAN LOWER LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
THE MEAN RANGE OF TIDE IS APPROXIMATELY 2.4 METERS

BASE MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
BATHYMETRIC SURVEY DATA COMPLIES WITH INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO) SPECIAL PUBLICATION 44 ACCURACY STANDARDS AND/OR STANDARDS USED AT THE DATE OF THE SURVEY

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

OREGON
QUADRANGLE LOCATION

UTM GRID AND 1984 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

ROAD CLASSIFICATION 1951
Heavy duty — Light duty
Medium duty — Unimproved dirt
U.S. Route — State Route

CONVERSION SCALES

DEPTH GRADIENT
Exposed at low tide
Maximum depth

ASTORIA, OREG.–WASH.
46123-B7-TB-024

1949
PHOTOREVISED 1984
BATHYMETRY ADDED 1984

DMA 1276 III NE – SERIES V892